Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1-5. (Canceled)

6. (Currently Amended) A constant velocity universal joint, comprising:

a hollow outer joint member in which plural guide grooves extending in an axial direction of the outer joint member are formed in an inner peripheral surface, and which is connected to a first shaft;

an inner joint member which is connected to a second shaft, and which is housed in the outer joint member;

plural leg shafts which is provided in the inner joint member, and each of which protrudes in a radial direction of the second shaft, and in each of which a convex sphere is formed in a tip portion;

an inner roller in which a concave sphere that is engaged with the convex sphere of each of the leg shafts is formed in an inner peripheral surface;

an outer roller which is housed in each of the guide grooves of the outer joint member so as to be slidable;

a rolling body which is provided between the inner roller and the outer roller so that the inner roller and the outer roller are movable with respect to each other in an axial direction of the inner roller and the outer roller, wherein

each of the leg shafts and the inner roller can be oscillated with respect to each other; a cylindrical surface is formed in a radially outer surface of the outer roller; a flat engagement surface which is engaged with the cylindrical surface of the outer roller is formed in a lateral surface of each of the guide grooves of the outer joint member; and the cylindrical surface of the outer roller satisfies following two equations,

$W1 > PCR\,(1 - \cos\theta)\,/\,2 + \mu_3 R3 + \mu_2 R1 = \underline{D(\theta)+L+S}$

$W2 > 3PCR\ (1 - \cos\theta) / 2 - \mu_3 R3 + \mu_2 R1$, wherein

W1 indicates a length in an axial direction of the cylindrical surface from a center of the cylindrical surface in the axial direction to an end portion of the cylindrical surface on an outer peripheral side of the outer joint member;

W2 indicates a length in the axial direction of the cylindrical surface from the center of the cylindrical surface in the axial direction to an end portion of the cylindrical surface on a joint center side of the outer joint member;

the lengths in the axial direction of the cylindrical surface of Wl and W2 are respectively equal to or longer than the length between the uppermost load concentration position (P_1) and the lowermost load concentration position (P_2);

PCR indicates a distance from an axis of the inner joint member to a center of the convex sphere of each of the leg shafts;

θ indicates a required maximum joint angle;

R1 indicates a radius of the cylindrical surface of the outer roller;

R3 indicates a radius of the concave sphere of the inner roller;

μ_2 indicates a friction coefficient when the inner roller is moved with respect to the outer roller in an axial direction of the inner roller; and

μ_3 indicates a friction coefficient between the convex sphere of each of the leg shafts and the concave sphere of the inner roller,

wherein the coefficients are determined based on the conditions from new through worn,

wherein a taper surface whose diameter decreases toward an end portion is formed in each of axially both sides of the cylindrical surface of the outer roller and a convex curved surface which protrudes toward an inner side of the outer joint member is formed in the lateral surface of each of the guide grooves at a portion opposed to each taper surface of the outer roller.

7. (Currently Amended) The constant velocity universal joint according to claim 6, wherein

~~a taper surface whose diameter decreases toward an end portion is formed in each of axially both sides of the cylindrical surface of the outer roller, and a taper surface is formed in the lateral surface of each of the guide grooves at a portion opposed to each taper surface of the~~

~~outer roller,~~ the taper surface formed in the lateral surface of each of the guide grooves becoming closer to a plane including an axis of the outer roller and an axis of the outer joint member toward each of axially both sides of the outer roller.

8. (Previously Presented) The constant velocity universal joint according to claim 7, wherein

a chamfer that is a curved surface is formed on each of axially both sides of the cylindrical surface of the outer roller.

9. (Previously Presented) The constant velocity universal joint according to claim 8, wherein

a concave curved surface is formed in the lateral surface of each of the guide grooves at a portion opposed to each chamfer of the outer roller.

10. (Previously Presented) The constant velocity universal joint according to claim 6, wherein

a chamfer that is a curved surface is formed on each of axially both sides of the cylindrical surface of the outer roller.

11. (Previously Presented) The constant velocity universal joint according to claim 10, wherein

a concave curved surface is formed in the lateral surface of each of the guide grooves at a portion opposed to each chamfer of the outer roller.

12. (Canceled).